

**DAIDS**

**VIROLOGY MANUAL**

**FOR HIV LABORATORIES**

**Version**  
**January 1997**

**Compiled by**

**THE DIVISION OF AIDS**

**NATIONAL INSTITUTE OF ALLERGY & INFECTIOUS DISEASES**

**NATIONAL INSTITUTES OF HEALTH**

**and**

**COLLABORATING INVESTIGATORS**

## **VIROLOGY SPECIMEN STORAGE RECOMMENDATIONS (for ACTG laboratories)**

The recommendations for adult and pediatric specimen storage have been developed for Adult ACTG and Pediatric ACTG laboratories. ACTG Investigators are strongly encouraged to use storage recommendations in all new ACTG study protocols whenever possible. Their use will save freezer space, which is at a premium in most labs, and will reduce technical error.

### **A. Specimens from Adult Patients**

Serum (SER)	1.0 mL X 5 aliquots
Plasma (PLA)	1.5 mL X 6 aliquots
Cells DMSO (CEL)	5 X 10 <sup>6</sup> /0.5 mL X 4 aliquots
Viable uncultured cells	
Qualitative Culture Supernatants	1.0 mL X 4 aliquots
Isolated from positive qualitative cultures	used for additional isolates as needed
Presumed Low Passage isolate (PLP)	0.5 mL X 4 aliquots
Low passage isolate from positive quantitative culture	
Ministocks Quantitative Cultures (STK)	1.0 mL X 4 aliquots
Isolate from positive quantitative cultures	
Cultured Dry Cell Pellets (CDP)	4 microcentrifuge tubes (uncounted)
Non-viable cell pellet from positive quantitative culture	
PCR	Whole blood processed per kit requirements in individual laboratories. Storage of PCR samples should be one of the following:  (WBP) 3 Dry Pellets from 0.5 mL blood (PEL) 2 or more Ficoll Pellets 1 X 10 <sup>6</sup> cells

### **B. Specimens from Pediatric Patients**

The suggested amounts are for optimal storage and/or processing. If less blood is obtained than the 4 mL, please refer to the Priorities List on the following page for guidance.

Serum (SER)	0.5 mL X 4 aliquots
Plasma (PLA)	0.5 mL X 2 aliquots minimum, 4 aliquots

Cells DMSO (CEL)	5 X 10 <sup>6</sup> /0.5 mL X 2 aliquots
Uncultured cells - viable	(freeze in 2 aliquots if cell count is low)

Qualitative Culture Supernatant (SUP)	1.0 mL X 4 aliquots
Isolate from positive qualitative culture	

Dry Cell Pellets (PEL)	1 whole blood pellet 0.5 mL
Non-viable cells	

Presumed Low Passage Isolates (PLP)	0.5 mL X 4 aliquots
Low passage isolate from positive quantitative culture	

Ministocks Quantitative Cultures (STK)	1.0 mL X 4 aliquots
Isolate from positive quantitative culture	

Cultured Dry Cell Pellets (CDP)	4 microcentrifuge tubes
Non-viable cell pellet from positive quantitative culture	

PCR Whole blood processed per kit requirements in individual laboratories. Storage of PCR samples should be one of the following:

For infants less than 18 months of age:

(WBP) 3 Dry pellets from 0.3 mL blood

For infants older than 18 months of age:

(WBP) 3 Dry pellets from 1.5 mL blood

(PEL) 3 Ficoll Pellets 1 X 10<sup>6</sup> cells

### C. Proposed Priorities Listing

For volumes of blood 2 mL:

Plasma: Test and store remainder  
Qualitative Culture  
PCR  
Cells in DMSO  
Dry Cell Pellets

PROTOCOL VIROLOGISTS SHOULD PROVIDE PRIORITY INSTRUCTIONS WHEN INSUFFICIENT SAMPLING IS AVAILABLE TO ACCOMPLISH PROTOCOL REQUIREMENTS.  
type.